

IN THE CLAIMS

Claims 1-87. (Cancelled)

Claim 88. (Currently Amended) An erythropoietin (EPO) composition consisting essentially of glycosylated EPO molecules which contain, on average, at least 4.3 N-acetyl-lactosamine units per N-linked carbohydrate chain of an EPO molecule in said composition, or an average of at least 13.0 N-acetyl-lactosamine units with reference to total N-glycosylation of an EPO molecule in said composition, wherein

~~i) the EPO molecules of said composition are produced by expression of an exogenous nucleic acid molecule in a CHO cell and are glycosylated, wherein the proportion of carbohydrate chains with N-acetyl-lactosamine repeats relative to the total number of N-linked carbohydrate chains is at least 30% or~~

~~ii) the EPO molecules of said composition are produced by expression of an endogenous nucleic acid molecule in a human cell and are glycosylated, wherein the proportion of carbohydrate chains with N-acetyl-lactosamine repeats relative to the total number of carbohydrate chains is at least 10%.~~

Claim 89. (Currently amended) An erythropoietin (EPO) composition consisting of glycosylated EPO molecules which contain an average number of at least 4.3 N-acetyl-lactosamine units per N-linked carbohydrate chain or, on the average at least 13.0 N-acetyl-lactosamine units with reference to the total N-glycosylation of an EPO molecule, wherein

~~i) the EPO molecules of said composition are produced by expression of an exogenous nucleic acid molecule in CHO cells and are~~

~~glycosylated EPO molecules, wherein the proportion of carbohydrate chains with N-acetyl-lactosamine repeats relative to the total number of N-linked carbohydrate chains is at least 30% or~~

ii) ~~the EPO molecules of said compositions are produced by expression of an endogenous nucleic acid molecule in a human cell, wherein the proportion of carbohydrate chains with N-acetyl-lactosamine repeats relative to the~~ to the total number of carbohydrate chains is at least 10%.

- Claim 90. (Previously presented) The EPO composition of claim 88 or 89, wherein the number of N-acetyl-lactosamine units is at least 4.5 per N-linked carbohydrate chain or 13.5 with reference to total N-glycosylation of each EPO molecule.
- Claim 91. (Previously presented) The EPO composition as claimed in claim 88, consisting essentially of glycosylated EPO molecules wherein (i) the product of the average number of N-acetyl-lactosamine units per N-linked carbohydrate chain and average sialic acid content per molecule of EPO is at least 43.3 or (ii) the product of total N-glycosylation of an EPO molecule in said composition and average sialic acid content per molecule of EPO is at least 130.
- Claim 92. (Previously presented) The EPO composition as claimed in claim 89, consisting of glycosylated EPO molecules, wherein (i) the average value of the product of average number of N-acetyl-lactosamine units per N-linked carbohydrate chain of an EPO molecule in said composition and average sialic acid content per molecule of EPO is at least 43.3 or (ii) the average value of the product of total N-glycosylation of an EPO molecule in said composition and average sialic acid content per molecule of EPO in said composition is at least 130.

- Claim 93. (Previously presented) The EPO composition of claim 91 or 92, wherein the product defined by (i) is at least 46.7, or the product defined by (ii) is at least 140.
- Claim 94. (Previously presented) The EPO composition of claim 91 or 92 consisting of glycosylated EPO molecules wherein the average of the number of N-acetyl-lactosamine units per N-linked carbohydrate chain of said EPO molecule is at least 4.3, or the number of N-acetyl-lactosamine units per EPO molecule, with reference to total N-glycosylation of said EPO molecule is at least 13.0.
- Claim 95. (Previously presented) The EPO composition of claim 88 or 89, containing from 2 to 5 glycosylated EPO isoforms.
- Claim 96. (Previously presented) The EPO composition of claim 94, containing 3 or 4 glycosylated EPO isoforms.
- Claim 97. (Previously presented) The EPO composition of claim 88 or 89, wherein said composition has a specific activity in vivo of at least 175,000 IU/mg of protein.
- Claim 98. (Previously presented) The EPO composition of claim 96, wherein said composition has a specific activity in vivo of at least 200,000 IU/mg of protein.
- Claim 99. (Previously presented) The EPO composition of claim 88, 89, 91, or 92, wherein the average sialic acid content per molecule of glycosylated EPO is at least 11.
- Claim 100. (Canceled)

- Claim 101. (Currently amended) The EPO composition of claim 88 or 89, ~~wherein the EPO molecules are produced by expression of an endogenous nucleic acid molecule in a human cell and,~~ wherein the value for the product of (i) the proportion of carbohydrate chains with N-acetyl-lactosamine repeats relative to total number of carbohydrate chains expressed in %, and (ii) the proportion of tetraantennary structures relative to total number of carbohydrate chains expressed in % is at least 800.
- Claim 102. (Canceled)
- Claim 103. (Previously presented) The EPO composition of claim 88 or 89, wherein said human cell is cultured in a serum free medium.
- Claim 104. (Previously presented) The EPO composition of claim 88 or 89, further comprising a diluent, an auxiliary substance, or a carrier.